THE USE OF SERIAL POSITIONING IN FIRST AFFIRMATIVE DEBATE SPEECHES

BY

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IN FIRST AFFIRMATIVE

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Abstract

Numerous studies have been done to determine the recall effect of primacy/recency order, climax/anti-climax order and serial position of arguments within visual and oral materials. Past research has resulted in conclusions for each order and often in inconclusive results. The one consensus seems to be that the most important arguments should not be put in the middle.

Being able to instruct debaters in organization is one of the expectations of a coach. There has yet to be any consensus as to the most advantageous method of organizing first affirmative speeches to guarantee that the judge remembers most accurately the most important arguments. For this reason, this thesis investigated the hypothesis that the serial position of an argument within a first affirmative debate speech would determine how well it is remembered.

Four video tapes were made of a first affirmative speech delivered by a high school debater. Each tape addressed the same agriculture topic and presented the stand that new standards of quality control on shipments of

grain to foreign nations were needed. The four issues alternated to test to serial position were significance, inherency, harm and solvency.

Also, demographic variables were examined. They included age, sex, education, debate experience and judging experience. Subjects were those who had signed up to judge at a local high school tournament in addition to some from that school's debate file.

Statistical tests used were frequency charts, chi-square, the Pearson Product-Moment Correlation Coefficient, and the Spearman-Brown Rank-Order Correlation Coefficient.

The dependent variable, accuracy in recall, was measured as the accuracy rating of the subject responses to requests to note the arguments. No statistically significant differences due to position and argument were found, therefore confirming the null hypothesis.

Analysis to determine the reasons for these results was conducted. Apparently, persons with higher levels of judging experience take more notes than do judges with less experience. Further, notetaking negated any recall differences between the versions, and therefore between the serial positions.

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INTRODUCTION

As long ago as 1925, Lund performed a pioneer investigation of primacy in persuasion. He felt order and arrangement were important in a presentation but questioned whether using the climax order of weaker to stronger was better than stronger to weaker. Although he was discussing the use of primacy-recency in opposing arguments, Lund's ideas set the foundation for studies in an area which would be applicable to organization in a high school debate speech, specifically, in a first affirmative constructive speech. In what serial position would the information best be presented to ensure that the judge remembers those arguments deemed most important by the affirmative team?

Primacy-recency, climax-anticlimax order and serial position cannot be used interchangeably but will be used to explore the topic of this paper as often as the research in each can be applied. Primacy-recency will often be used in discussion a speech in which there are both arguments for and against, or a speech on each side of the issue. Most arguments here deal with whether a listener remembers best what is heard first or what is heard last on the topic. Serial position considers, in a series of arguments on one side of an issue, where best to position those arguments considered to be strongest. The classic position effect has been defined as "an inverted U in

position effect has been defined as "an inverted U in which end items are easier to learn and better remembered than items more central in the list (Banks, White and Mermelstein, 1980, 623-624)." Bettinghaus defines the climax-anticlimax situation in this way. "A climax order is that arrangement of materials in which the most important materials are placed last; an anticlimax order is an arrangement in which the most important materials are presented first (Bettinghaus, 1968, p. 152)."

(Several general beliefs are accepted in the communication field concerning these concepts.) Sponberg states that "In modern rhetoric, the climax order of presentation is still used and recommended. Many speakers have employed this method of speech organization (Sponberg, 1946. p. 35)." Brigance and Immel differ with this viewpoint.

> "The orthodox mode of arrangement for centuries has been that of climax. 'Save your strongest point until last' has been the gist of the rhetoricians' rule although they admitted the rule to be proved by frequent exceptions. Now climax certainly is a useful device for developing a sentence, a paragraph, and even a main head; but recent investigations have cast doubt upon, if not indeed overthrown the unquestioned acceptance of its principle for arranging main heads. Advertisers get their best results by reversing the order and starting with their strongest argument. They have found it so after repeated trials, until salesmen are now instructed to start with the most striking features rather than to work up to a climax (Brigance and Immel, 1938, p. 298)."

In other words, there really is not an agreement among

those in communication circles as to the best method to use. Weaver sums up the need for more conclusive research. "It has long been supposed that in presenting a series of statements or arguments, the proper procedure is to move from that of least importance to that of greatest. While the experimental data on this point are not extensive, they are sufficient to suggest that, at least in certain instances, anticlimax may be a more satisfactory order (Weaver, 1941, p. 354)."

JUSTIFICATION FOR THE STUDY

"Structured messages are to be preferred to unstructured messages. Familiar structures seem to be more effective than unfamiliar ones. But after making these general conclusions, the research on message structure tells us little. It is still an area ready for development (Rokoff and Miller, 1980, p. 8)." In order to more effectively teach organization, we must first have a better knowledge of how best to present the arguments within a persuasive speech.

Supporting this paper's hypothesis would result in a new approach being added to the teaching of persuasive speeches, and constructive debate speeches specifically. It would enable the affirmative team to control more effectively how the rest of a particular debate would develop and to limit negative attempts to skim over strong

arguments they are unable to answer. It could possibly have impact in other areas. If in fact, argument order does make a difference, other types of speeches might benefit from specific study in this area. Examples of these types might be political or sales speeches.

That this is a responsibility is noted in an article by Gulley and Berlo. They state, "The rhetorician or communication theorist should be able to advise the speaker on the relative persuasive effect of these differing structures. He also should be able to suggest which order will result in maximum retention of information transmitted. No conclusive data are available on which to base such recommendations (Gulley and Berlo, 1956, p. 288)."

In order to accomplish this goal, many aspects of the speech must be considered. It may be that there really is no overriding strength to either primacy or recency, climax or anticlimax order and that serial position does not matter. However, considering the value such information would have, there is a need to examine more carefully the placement of arguments within a first affirmative debate speech.

PURPOSE OF THE STUDY

The purpose of this paper is to examine the impact of the arrangement of main arguments in a first affirmative

speech. The hypothesis, then, will be that the serial position of an argument within a first affirmative speech will determine how well it is remembered. This will be based on qualitative analysis comparing the strength of the first argument, the strength of the last argument and the strength of the two middle arguments. They will be considered as both being middle as opposed to separate considerations as this is most similar to the approaches found in the survey of the literature.

It would appear from past research that the primacy position should be the strongest. Several of the studies came to this conclusion, although in many, the evidence was not compelling when compared to recency. Most of the results appear to conclude that the only definitive answer is that the arguments which are most important should not be placed in the middle. For this reason, it is assumed that this paper will result in judges preferring those arguments placed first but not overwhelmingly over those placed last.

This thesis will be divided into five chapters. Chapter II will be a review of the literature. It considers the research on primacy\recency, climax\anticlimax and serial positioning. Chapter III will discuss methodology in light of how subjects were involved, materials used in the study including written and oral instructions, and the procedures used in setting up the ac-

tual experiment. Next, Chapter IV will discuss the results of the study in view of the qualitative evaluation tools. It will also consider these in comparison to expectations and the possible reasons for the results. The last chapter will be a summary including limitations of this study and possible future applications.

CHAPTER II

REVIEW OF THE LITERATURE

"Experimental evidence shows that the first argument presented in a series has a more powerful effect than do arguments presented later...The first affirmative speaker in a debate has a golden opportunity to influence the audience, which will not come to any other speaker on the program (Weaver, p. 355)." It is how to best use this opportunity with which we are concerned. Literature discussing the most effective method of organization leaves us mostly with questions.

Several experiments have been conducted to help answer those questions in different modalities. Bettinghaus found that logical structures within messages did not play a large part in persuasion (Bettinghaus, p. 157). This was contrary to what was expected. It would be assumed that logical arrangements using inductive or deductive form would be more persuasive and therefore more memorable. Cohen found that "The last-heard argument is most effective when there is a long delay between the first and second communications coupled with an immediate measurement after the second communication" when there are opposing speeches which would favor recency (Cohen, 1964, p. 14). The findings go on to conclude that time deter-

mines which is the most advantageous position. Cronkite found that the listener's interest determined how much attention they gave and that high interest subjects responded better to climatic order while low interest subjects were more attentive to anticlimax (Cronkite, 1978, p. 196). he also discussed the importance of the first impression the listener has of the speaker and its effect on judgment. The impact on memory of sizes of advertisements was studied by Hovland, Janis and Kelley. They suggested that the reason one part of a communication may be remembered more accurately than another is the interest and attention evoked by that segment. They found that "subjects remembered the name of the product better with the anticlimax order (where the large ads came first, followed by the small) than when the reverse order was employed (Hovland, Janis and Kelley, 1954, p. 115)." This finding applies to the purpose of this thesis, favoring putting most important arguments first while keeping in mind the potential for a difference in level of interest.

In 1961, a study was conducted to discover which suggestions, those offered first or those offered last, are remembered most accurately in a problem solving group. The results tended to follow those in tests for serial position of items. Suggestions offered first were more likely to be remembered and accepted than those offered last. Those in the middle were accepted least. These

results showed that an idea presented first had no competition given before, and when last was strongest it was because the listeners had carefully considered all suggestions (Shaw, 1961, p. 54).

Four other studies examined serial position from different viewpoints. Jersild presented a fictional biography vocally which contained seventy statements of fact and determined that "from this study it appears that the first statements in a verbal discourse make decidedly the strongest impression (Jersild, 1929, p. 58)." In order to overcome this bias, "it is necessary to expand the time involved in giving vividness devices (Jersild, p. 66)." In addition, he found that repetitions do not proportionately increase the ability to remember facts. Brodie concluded that serial position and presentation time affected recall only after the alteration of rehearsal time and item retention interval (Brodie, 1974, p. 2.). This dissertation, done with seven experiments, investigated rehearsal time; i.e., time spent rehearsing and the time between rehearsal and recall. Modality differences, auditorially and visually presented words and visual words and pictures were examined by McCabe. His dissertation research concluded that primacy effects were present for three modalities with recency occurring for the auditory words (McCabe, 1981, p. 3352-B). Rehearsal and short-term memory were included in the discussion. Finally, Glanzer

and Peters found that "On the basis of these findings, it is concluded that the major factor determining the serial position effect is the amount of space between the end and the beginning of the list, with an increase in spacing producing a more marked serial effect (Glanzer and Peters, 1962, p. 260)."

Doob studied primacy and recency in comparing prose and a newsreel. Prose items showed a greater recall rate but no indication of recency. The newsreel items which were shown last were remembered most accurately (Doob, 1953, p. 202). These results were considered in light of drive strength and retroactive inhibition. Sponberg found a dominance of anti-climax order in a speech on a proposition of experience and summarized that this was because it gains interest and attention in hearing the less important items presented later (Sponberg, p. 43). Even though there were several points considered, in none of these was climax more effective.

Sentence completion tasks were used by Hovland to arrive at the conclusion "subjects tended to learn better, or at least to retain better, information contained toward the beginning of the communication (Hovland, 1954, p. 55)." In the same manner as the subjects in this thesis study, the participants were not told to learn or memorize the material presented. Brigance and Immel discuss climax and anti-climax in reference to arranging main heads.

They state that the general rule in the past has been to put strength at the end. However, they support anti-climax as being strongest using several sources. One is a conclusion from a study by Lund, quoted elsewhere in this paper, saying that, "The general conclusion was that, especially on controversial questions, one should not follow the order of climax in arranging main heads but should start at once with the strongest argument (Brigance and Immel, p. 299).

SERIAL POSITION AND MEMORY

Three different groups worked with word lists in order to examine serial position effects. Toglia and Kimble asked their subjects to "judge the location of the items they recognized" after being given a list of words." In another part, they were asked to recall certain words "from particular portions of the list." It was decided that "the data...revealed that subjects retained considerable serial position knowledge, especially for primacy and recency words," (Toglia and Kimble, 1976, p. 431) without a dominant influence in either direction.

Murray used words lists which were read, then asked that recall be vocalized after a six second interval and after a thirty second interval, using the Peterson technique. It was found that recall was highest for the first

items, possibly because "the final items of the list did not persist in primary memory long enough for transfer to secondary memory, because the distractor task interfered with rehearsal of those items (Murray, 1979, p. 65)." The lack of a strong finding for serial position was one of the results in this area. "The main finding of the present study, namely that new terms can be added to a position in an overlearned serial list and behave immediately as though they had occupied that position in the list all along, indicates that the various effects found in processing of serial lists cannot be ascribed to differential learning of the terms at various positions in the list (Banks, et. al, p. 629)."

An interesting experiment dealing with memory based upon success rate was done by Jones, Shaver, Geothals and Ward. Subjects were asked to remember the performances of several people who had different arrangements of success or failure in performing a task. It was shown that subjects recall more success for the performer who showed strength in the beginning than for the ascending and random performers which might indicate that people remember and put more emphasis on what they hear first (Jones, Shaver, Geothals and Ward, p. 317).

Martin and Jones performed four experiments, one auditory and three visual in which the subjects heard thirteen words and were then asked to count backward in

threes. Their findings were that "it is the last items to enter into the primary memory which tend to be lost first (Martin and Jones, 1979, p. 275)." Doob found that recall order is associated only with primacy in the use of prose items (Doob, p. 204). To do this he asked students to read paragraphs on controversial subjects. Two days later they were asked to list topics and arguments given for each. Complex pictorial stimuli were used to test memory in three experiments by Stanny. "In contrast to the relatively flat serial position functions obtained for the recognition of target pictures, bow shaped serial position functions demonstrating both primacy and recency effects were obtained for the retention of serial order information in all three experiments (Stanny, 1981, p. 1214-B)." He also found that repetition improved retention but did not affect serial position strength.

Two dissertations can be discussed in this section. Twardowski presented a lecture with visual displays. Then the subjects were asked to take three tests: recognition, comprehension and application. They were given no time limit. Her intention was to apply this to the retention of lecture material in the classroom. She found that "lack of significant differences in order of presentation indicate that no primacy or recency effects were present (Twardowski, 1972, p. 34)." A finding of Williams was that the loss of information in a pitch sequence is due to

item, not time delay. He also noted that "the similar behavior of the recency position, even though its overall level of accuracy was less remained an incongruency (Williams, 1973, p. 5238-A)."

PREVALENCE OF PRIMACY

Although Sponberg, whose experiment is discussed later in this section, made the statement that "No direct experimental evidence is available demonstrating the influence of order upon the effectiveness of a single speech" (Sponberg, p. 37) there have been many experiments using serial position. Cronkite, in a discussion of the studies done in this area, found that "the only conclusion to be made at this time seems to be that the strongest arguments should be placed in first or last rather than in the middle of the message (Cronkite, p. 196)." Hovland, Janis and Kelley, also discussed later, agree with this in discussing written communication (Hovland, et. al., p. 117). Other results, however, tend to favor primacy.

An interesting dissertation was done by Rankis which dealt with cognitive processing in learning and how that was affected by sexual gender. Among other areas discussed was the supposition that females have an advantage over males in recall of information. Primacy was found to

operate in the presence of the concept by attribute message condition. There was no difference, though, in males versus females or when considering verbal organizing ability (Rankis, 1981, p. 2366-A).

Lana examined primacy and recency affects in relation to interest by using a tape and reading. It was discovered that "primacy effects were present for the tape medium-interest group and for the read high-interest group. A significant recency effect occurred in the read medium-interest group. The high-interest tape group showed no significant directional effect," (Lana, 1963, p. 12) thus leaving us with no conclusive outcomes.

Lund, in a section entitled, "The Law of Primacy in Persuasion," points out that, "In textbooks dealing with composition, oratory, debate and argumentation, ample attention is given to intellectualistic factors, such as clearness, logic, and understanding, all of which play a part in conviction and persuasion. Much less attention is given to the importance which attaches to habits of mind, habits of thinking, and common belief (Lund, 1925, p. 185)." It is with habits such as these we are concerned here. He goes on to the experiment in which he gave subjects a pro and con discussion on a mimeographed form. The first discussion consistently determined the final position of the subject (Adams, 1920, p. 330) "thus showing a primacy leaning." Using a combination of firms and

advertising sizes, Adams tested climax/anti-climax which was determined by where the largest ad was placed in a series. He concluded that anti-climax order is more effective (Adams, p. 338).

OPINION CHANGE

Opinion change is linked to primacy/recency in several studies. Lana, noted earlier, examined seven studies on primacy-recency order effects and discovered that "less exposed group generally yield a recency effect while high exposed groups yield primacy effects." The discussion went on to state, "the fact that almost twice as many primacy effects were isolated as recency effects is significant because seven distinct experiments, performed under the direction of three difference investigators, are involved (Lana, 1964, p. 314)."

Gulley and Berlo disagreed in their study to compare intercellular and intracellular speech structures and their effects on attitude change and retention. They found that "In attitude change, climactic order was found to be superior to anti-climactic and pyramidal; however, they admit, "the differences were not statistically significant (Gulley and Berlo, p. 296)."

Stone, using ostensible trial testimony, did research to discover whether order affects jurors. He did this by

having jurors make tentative verdicts after the first speech and then comparing them to the final verdicts. In addition, he considered the use of prior refutational immunization. The results led to the conclusion that, "The evidence clearly indicates that, other things equal, first impressions tend to have a disproportionate affect on final impressions by decisionmakers in roles such as that of the juror (Stone, 1969, p. 247)." While this is a pro-con situation, the strength of a first argument has consideration in the hypothesis of this study. Sponberg, cited earlier, gives us a different overall picture by saying, "there was no significant difference between the order of presentation as revealed by the ratings for convincingness (Sponberg, p. 44)." (Knower did a study with seven questions in mind; among them were: affect of printed argument on attitude changes, sex differences in the affect, and printed versus oral.) The seventh question dealt most closely with the area being discussed here because it considers order and its influence on direction and amount of change in attitude. In essence, Knower agreed with Stone when he states that, "When two speeches on opposite sides of the question were read, primacy in the order of reading influenced the amount and possibly the direction of change in attitude which occurred in the group (Knower, 1936, p. 523)." Desirability influences opinion change, according to Hoviland. We are told that

placing the idea most highly desirable to the subject first in the presentation gains the most advantage (Hovland, 1957, p. 136).

OTHER SOURCES OF INFLUENCE

In considering this topic, it is necessary to note the rather extensive findings on influences other than serial position which affect memory or outcome of studies. Many of these were done in conjunction with studies already cited. For example, Hovland, Janis and Kelley said that if an audience is highly interested there will be factors other than order which will determine outcome (Hovland, et. al., p. 115). They go on to suggest that attention (46), degree of compatibility (Hovland, et. al., p. 115), incentive (Hovland, et. al., p. 115), and familiarity with issues (Hovland, et. al., 1954, p. 120) will play a part.

In examining the material earlier presented by Hovland, there are other influences to be considered. Interference in the learning of a second part may be affected by the learning of the first argument (Hovland, 1957, p. 55). In addition, "the results support the hypothesis in that the communicator elicited more total agreement from his audience when he presented the conclusion consistent with their desires first and the undesirable ones later

(Hovland, 1957, p. 137). Needs were also discussed by this author. The statement is made that "Individuals with high need for cognition, however, may be capable of taking all bits of information into account, regardless of whether the information is the first or last to come to their attention (Hovland, 1957, p. 145)." "Those with low cognitive needs were positively affected if they received the motivating material prior to the informational communication (Hovland, 1957, p. 136)."

Five studies have presented other areas which should be considered. Cohen suggests that attention, learning and acceptance will affect memory (Cohen, p. 8). Bettinghaus considers prior attitude, strength of the message and level of commitment to be important (Bettinghaus, p. 153). Evaluations of the messages and of the source are affects suggested by Roever (Roever, 1976, p. 51). Sikkink investigated whether combining order and authority would affect trends reported by Sponberg and Gilkinson. A persuasive speech was given to students who had previously voiced their opinions on the subject discussed; they were then asked to note attitude, convincingness of speech and answer true-false questions. The questioning process was repeated ten weeks later. "Both of these interpretations would suggest that order and authority are like many of the variables in rhetoric in that their effect is largely dependent upon the particular speaker, audience, speech

and situation (Sikkink, 1956, p. 77)." Cronkite adds to the list considerations of a credible and trustworthy source, opening arguments and personality impression (Cronkite, p. 195).

Clark used methods similar to the ones in this study to examine order effect in persuasion.

> "In order to test for the existence of order effect in persuasive communication, four short speeches on the topic of a guaranteed annual income were transmitted via video tape to eight groups with the serial combination of the messages based on the pro/con and weak/strong dimensions. While the general hypothesis that audience evaluation is a function of the order of presentation was not supported, seven specific interactions were observed to result from the factors of message strength, sequential length, and message valence (Clark, 1974, p. 322)."

He suggests that "prior awareness did not differently affect audience evaluation of persuasive messages" (Clark, p.322), but Lund says once knowledge of the idea is given and an opinion formed, the audience will hesitate to switch to the other side (Lund, p. 189).

Time has been presented as being influential in how well an argument is remembered. Doob states that "The shorter the time interval between seeing the film and answering the questionnaire, the greater the tendency to recall items correctly (Doob, p. 204)." Fatigue is a consideration according to Weaver (Weaver, p. 355). Jersild suggests that recency may be strongest because "it

may profit from the fact that the time interval separating the presentation and the recall is less for items in the final position (Jersild, p. 66)."

Gilkinson discusses why there are not larger differences in the results comparing primacy/recency and climax/anti-climax. He concludes that

"1. The inclusion or exclusion of the names and identification of the authorities or the shifting of order might have been a small factor in relations to the total impact of the speech.

2. The listening task was easy.

3. The listeners probably were strongly motivated (Gilkinson, 1954, p. 192)."

Some of these ideas presented by various authors will need to be kept in mind when analyzing and discussing the results of this study.

CHAPTER III

METHODOLOGY

This thesis was designed to determine if the placement of arguments within a first affirmative debate speech would influence how well a judge remembered them. There was one basic research question:

> **Research question:** Will variations in the serial positioning of key first affirmative arguments in a speech influence debate judges' accuracy in the recall of the argument?

Independent Variable:

In order to examine this question, four video tapes were made of a first affirmative speech delivered by an experienced high school debater. It dealt with the 1986-87 debate topic which was: Resolved: That the Federal Government should implement a comprehensive long-term agricultural policy in the United States. This particular approach presented the stand that there should be new standards of quality control on the shipments of grain we sell to foreign countries. The debater presented the four stock debate issues. Significance showed how exports suffer because of poor grain quality, harms discussed why this decreases exports and hurts the U.S. image, inherency presented the reasons there have been no changes thus far, and solvency showed why a change would be beneficial.

This was a typical first affirmative speech except that it did not contain a plan. Each of four key issues: significance, inherency, solvency and harms, was given the same substructure. Three subpoints were developed for each of those issues with one piece of supporting evidence for each of the subpoints. In addition, each issue was orally presented for nearly the same amount of time. Inflection, gestures and other physical responses were kept to a minimum and were duplicated in each version. In each of the four, the issues were sequentially arranged in a different order. The speech on each tape lasted a total of eight minutes. A copy of the speech is presented in Appendix C.

Validation checks were conducted to control for possible contamination effects due to unintended variations in the persuasiveness of each of the versions as well as the perceived organization of each. Pairing version and persuasion revealed that there is no influence of version on the degree to which subjects were persuaded ($r = -.0950$, $sig = .333$). The same conclusion can be drawn by looking at perceived organization and version ($r = -.0950$, $sig = .377$). (See Table IV)

Pertinent demographic variables measured in this study were age, sex, education, debate experience and judging experience. The subjects were asked to note on open-ended items their age and sex, and to mark highest

grade level achieved using normal educational divisions. To determine note-taking, the rank-order measure asked subjects to note whether they took no notes, some notes or outlined the entire speech. Finally, subjects were required to record their judging experience during the past two years in increments of ten rounds, and to circle the appropriate number of years of debate experience. These were then tabulated using frequency charts, the Pearson Product-Moment Correlation Coefficient, and Spearman-Brown Rank-Order Correlation Coefficient.

Dependent Variable:

The dependent variable, accuracy in recall, was measured as the accuracy rating of the subject responses to requests to note the arguments. The subject was asked to note what they remembered about the argument (see questionnaire in Appendix E). Each response given for each of the topic areas was given a rating on the scale of zero to three. A three was assigned if all of the subpoints in the argument were remembered accurately, and 0 was assigned if none of the subpoints were remembered or were written down inaccurately. All coding was done by the experimenter. Of the 106 questionnaires, six were rejected because the written responses were accurate but placed under the wrong heading.

Subjects:

An invitation to participate in the study was sent to

each person who had agreed to judge at a high school debate tournament in a large midwestern city (see Appendix A). A short time later, each potential subject was contacted by telephone to determine his/her availability. Each subject was scheduled to view the tape before his/her first round of tournament judging in order to avoid any adverse affects from listening to other speeches. Seventy-seven subjects attending the tournament participated.

Because this did not result in enough participants, another letter was sent to those persons listed in a judge's file kept by the debate squad (see Appendix B). Twenty-nine people participated at one of two times on one of two evenings.

Descriptions of the subjects can be seen by examining the demographics using a frequency chart (see Table I). The span of ages was from 19 to 64. However, the age of the judges varied little. Most were in the thirty-to-forty year-old range, reflecting the age group into which most parents of high school aged children fall. Forty-two percent of the judges were between 30 and 39, while 32 percent were between 40 and 49. Forty-seven percent had college education, which would be extremely high compared to a random sample of the general population.

In the category of judging experience, eight had judged 11 to 20 rounds in the past two years, none fell in

the 41 to 50 rounds of judging, two in the 31 to 40, and two in the 50 plus. It would seem that most people who judge either have never done so before or do so only once a year at the local high school tournament. Of the 106 judges, only 25 took no notes whatsoever, while the remaining 79 subjects took some or complete notes of the speech. As shown by the data, there is a relation between judging experience and notetaking. Those who have judged more rounds tend to take more notes.

Most of the subjects had no debate experience. The next most concentrated group was the one which contained ten subjects who had apparently debated throughout high school. Ten others debated part of that time. It is possible that some of these 20 debated one to four years in college but that percentage would probably be small.

The high, low, mode, mean, and standard deviation of these demographics can be seen in Table I.

Design:

The design employed in this study was a post-test only (Campbell and Stanley, 1963, p. 25). Subjects were randomly assigned by lot to one treatment condition.

R X_1 0 A = significance

R X_2 0 B = inherency

R X_3 0 C = harm

R X_4 0 D = solvency

R = random assignment

O = argument recall test

Treatment 1 = ACBD, 2 = BADC, 3 + CBDA, and 4 = DCAB.

Appendix C shows the written speech in the ABCD order. Each spoken version was given by simply rearranging the pages to fit the required design variations. Each speech used the same introduction and conclusion.

Procedure:

Prior to the tournament, each subject was randomly assigned by lot to one of four treatment versions of the tape. As they arrived and checked in with the experimenter, the subjects were alternately assigned to one of two rooms set up in the same manner. In each carpeted, thirty-desk classroom was a television and video cassette recorder. The subjects were allowed to sit wherever they chose within the room. They were then welcomed as a group and asked to fill out a release form in addition to noting if they would be interested in seeing a copy of the results upon completion of the project. After hearing the instructions (see Appendix D) which included telling them to use notes or not as they would normally during a debate round, they viewed an eight-minute speech. After the speech, each was given a questionnaire with the simple instructions to fill it out to the best of their ability. This took about 15 minutes. Subjects were then thanked for their participation in the study and debriefed (see Appendix D).

Subjects participating in the evening sessions were exposed to the same procedural format. The subjects were randomly assigned alternately to one of the same two rooms used originally as they arrived. The same instructions and machinery were used to view the scheduled versions.

CHAPTER IV

RESULTS

Results were based on 106 questionnaires consisting of 27 from version one, 28 from version two, 25 from version three, and 26 from version four. Data were analyzed using chi-square analysis, Pearson Product-moment Correlation Coefficient, Spearman-Brown Correlation Coefficients, frequency counts, means and standard deviations. The original intention of this study was to determine whether or not serial position order would insure that certain arguments would be remembered from a first affirmative debate speech. From initial research, it was assumed that the primacy position would be the most accurately remembered. However, after reviewing the literature, there was doubt as to whether primacy or recency would be the strongest, but it was clear that either is preferable to the middle positions. In order to determine which would be strongest, a chi-square was used. No statistically significant differences due to position and argument were found since the null hypothesis was supported (see Table 2).

Post hoc analysis of the data was conducted to determine why the research hypothesis was not supported. The answer lay in the correlation results between notetaking and each of the four arguments. Since notetaking and cor-

rect recall scores were measured at an ordinal level of measurement, Spearman-Brown Rank-Order Correlation Coefficients were computed. Apparently, notetaking negates any recall difference between the versions (r = .5179, sig = .000; r = .6649, sig = .000; r = .4763, sig = .000; r = .6546, sig = .000).

Examining other correlations provides information on judging ability indicators. For example, looking at the pairings of age with notetaking, it can be seen that younger judges tended to take more notes than did the older ones (r = -.2010, sig = .005 and r = -.2597, sig = .004). Also indicated is that notetaking increases moderately with judging experience thus favoring experienced judges when putting together a tournament (r = .2895, sig = .0001, and r = .3095, sig = .001).

One of the more interesting side notes is found when comparing each of the four arguments with the subject's ability to predict which argument he/she remembered most accurately. According to the findings, the subjects felt most confident about remembering harm and solvency but when they were actually asked to note them, subjects were unable to do so with any great degree of recall accuracy (r = -.0025, sig = .980; r = -.0399, sig = .685; r = -.0880, sig = .370; r = -.1701, sig = .081).

Another pairing of interest was that of what the subjects felt they remembered most accurately and which ver-

sion. The statistics show that there is no link between version and perceived recall (r = -.0012, sig = .990).

Since, as noted earlier, notetaking negates any differences between the arguments, the same series of statistical test was run using only those questionnaires from subjects who had not taken notes. It was assumed that these 25 would show a primacy or recency effect as they would deal only with what was remembered and not what was written down. However, this was not the case. The chi-square was not possible as there were empty cells.

Examining frequencies revealed that those who took no notes tended to remember very little of the speech. The results are shown in Table III. Realizing that the recall row reflects that three subpoints of each of the arguments noted across the top, and that the numbers in the columns beneath those arguments show how many were remembered accurately, the absence of primacy or recency becomes obvious. Only twice were more than one subpoint remembered and in those cases there was still one subpoint left out. One was version four, argument harm and the other was version two, argument solvency. All others remembered none of what they heard, or, in 32 instances, they remembered one subpoint. None of the versions or arguments was significantly stronger than the others. Neither primacy nor recency prevailed in this examination.

CHAPTER 5

CONCLUSIONS

DISCUSSION

High schools all over the nation train debaters and host debate tournaments. Chances are high that many persons connected with those schools will be asked to judge. The literature in debate and in the psychology of speech suggests that the order in which arguments are presented in a speech may influence judges' recall of those arguments. In particular, some scholars have found evidence to support the primacy effect on recall. Here, Lana, cited earlier, found primacy a factor when using tapes for medium to high interest groups and Murray came to the same conclusion for lists of words. Using a biographical sketch, Jersild found a primacy effect. Others have reported recency effect on recall. For example, Doob found that in newsreels, the most recent item was recalled most accurately. The present study tested the primacy-recency position argument using high school debate judges. These judges were randomly assigned to one of the four serial position manipulations and asked to monitor the speech as they would any first affirmative speaker in a debate round.

Contrary to expectation, the data provided no support

for the hypothesis that the serial position of arguments supporting key issues in a first affirmative debate speech would influence judges' recall of specifically positioned arguments. Subsequent analysis of the data generated several possible reasons as to why the null hypothesis was supported.

First, notetaking appears to be one factor that negates serial position effects on recall accuracy. The Spearman-Brown Correlational test supports a moderate link between notetaking and recall accuracy.

A second may be lack of familiarity with the debate topic. The topic presented in this study examined the need for federal policy changes involving the quality of grain shipped overseas. However, few of the judges were involved in agriculture in their everyday lives; occupations ranged from teachers, attorneys and nurses to computer programmers and personnel directors. Research by Hovland, Janis and Kelley discussed earlier had demonstrated that lack of familiarity can influence recall accuracy scores. Most scores averaged one out of three remembered correctly, showing poor recall in general.

Third, the fact that this study does not reach a conclusion favoring either primacy or recency may possibly be attributed to the fact that this group of people, debate judges, may differ from the normal population. The education level of the subjects was higher than a cross section

of the population would be. In addition, some were experienced, either through having been a debater or having judged many rounds in the past. Seventy-five percent took notes, which might not usually be the case with most people. Most of the subjects used in previous studies were random classes from a university or a similar group. Generally, the material used in past experiments could be heard and understood by a cross section of the public, while the material for this study was specifically from the field of debate. The training derived from working in the debate field would possibly influence the judge to remember some issues more accurately than others. For example, if the judge accepts that there is a harm and it cannot be changed within the status quo, or is inherent, the degree of significance may become unimportant.

LIMITATIONS

One limitation might have been the construction of the questionnaire. The dependent measure listed the four issues: significance, inherency, solvency and harm, and asked the subjects to write the subpoints under each. This procedure may have been confusing for those who were not well versed in debate and its language. This could have prevented them from noting what they actually knew. Indeed, six cases were not used because the subpoints

listed were accurately repeated but were listed under the wrong main issue. An answer might be just to ask subjects that they list the one argument they most clearly remember and then list its subpoints. This would not tie them to a specific issue. In addition, this could have been the problem with the statistics noted when comparing the question on what they felt they remembered more clearly and whether they actually did. It could be that the subject simply wrote the wrong main issue heading even though they accurately remembered the argument.

GENERAL CONCLUSIONS

Even though the results confirmed the null hypothesis in regard to serial positioning, there were some possible applications gained from examination of the statistics which were done in addition to the chi-square.

In order to have a good tournament, the best quality judge is desirable. All coaches have an idea as to what this means but they do not always agree. Also, they often use people on the grounds that these people have judged before. If we apply what has been learned from this study, we can more accurately predict what type of person will be the most able to accurately remember what has been presented and then weigh that information. To begin with, it is obviously of benefit to have those with previous

debate experience. They are more likely to understand the language and will also more often take at least some notes.

Age may also be a factor to consider. According to the Pearson formula, younger judges tend to take more notes. It may be that this is because many of the younger judges tend to be those who have recently been in high school debate. They would take more notes because of increased experience with the field and the knowledge of how important notes can be. In either case, increased notetaking leads to increased accuracy, therefore making the young people more desirable.

Judging experience would also be an area to consider. Again, comparing it with notes, those with additional experience tend to take more notes.

SUGGESTIONS FOR FUTURE RESEARCH

Since judges tended to become the important factor in this study, future research might be aimed toward more specific information in this area. Research should consider the question, Are judges an entirely unique population? A possible way to answer would be to use the same type of methodology but employ two groups. One of the groups could be the same as in this study and the other group could be more representative of the general

population.

In order to make the information applicable to high school competition, a possible answer might be to use an individual speech from the oratory category. Another approach would be to use the same population but not allow the subjects to take notes.

Since the results show the importance of notetaking and experience, important information could be derived from setting up separate studies to examine these individually or construct a study to compare the two.

BIBLIOGRAPHY

Adams, H.F. "The Effect of Climax and Anti-Climax Order of Presentation on Memory." Journal of Applied Psychology. 1920. 4, 330-338.

Banks, William P., Hedy White, and Robin Mermelstein. "Position Effects in Comparative Judgments of Serial Order: List Structure vs. Differential Strength." Memory and Cognition. Vol 8 (6). 1980. 623-630.

Becker, Sam L. "The Ordinal Position Effect." QJS. 2 (April). 1953. 217-219.

Bettinghaus, Edwin P. Persuasive Communication. New York: Holt, Rinehart and Winston, Inc. 152-157.

Brigance, W.N. and R.K. Immel. Speechmaking. New York: 1938. 298-299.

Brodie, Delbert Arnold. "Are Effects of Serial Position and Presentation Time on Free Recall Mediated by Changes in Rehearsal?" Dissertation Abstracts International 35/3-B (1974).

Campbell, Donald T., and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Boston: Houghton Mifflin Co., 1963. 25.

Clark, Anthony J. "An Exploratory Study of Order Effect in Persuasive Communication." The Southern Speech Communications Journal 39 (Summer) 1974: 322-332.

Cohen, Arthur R. Attitude Change and Social Influence. Basic Books, 1964.

Cronkite, Gary. Persuasion: Speech and Behavior Change. Indianapolis: Bobbs-Merrill, 1978: 195-204.

Doob, L.W. "Effects of Initial Serial Position and Attitude Upon Recall Under Conditions of Low Motivation." Journal of Abnormal and Social Psychology 1953: 48, 199-205.

Gilkinson, Howard, Stanley F. Paulson, and Donald E. Sikkink. "Effects of Order and Authority in an Argumentative Speech." QJS 40, (1954): 183-192.

Glanzer, M. and S. C. Peters. "Reexaminiation of the Serial Position Effect." Journal of Exp. Psych (1962, 64): 258-266.

Gulley, Halford E., and David K. Berlo. "The Effects of Intercellular and Intracellular Speech Structure

on Attitude Change and Learning." Speech Monographs 23 (1956): 288-297.

Hovland, Carl I., et al. The Order of Presentation in Persuasion. New Haven: Yale University Press, 1957.

Hovland, Carl, Irving Janis, and Harold Kelley. Communication and Persuasion--Psychological Studies of Opinion Change. New Haven: Yale University Press, London 1954.

Jersild, A. "Primacy, Recency, Frequency and Vividness." J Exp Psychology (1929): 12, 58, 70.

Kaufman, Gale. "Serial Position in Auditory Verbal Short-term Memory Among Conduction, Broca's and Anomic, Aphasics." Dissertation Abstracts International 43/5-A (1982).

Knower, F.H. "Experimental Studies of Changes in Attitude: A Study of the Effect of Printed Argument on Changes in Attitude." Journal of Ab and Social Psych 30 (1936): 522-532.

Lana, Robert E. "Interest, Media, and Order Effects In Persuasive Communications." Journal of Psychology (1963): 56.

Lana, Robert E. Three Theoretical Interps of Order Effects in Persuasive Communications." Psychological Bulletin 61 (1964): 314-320.

Lund, F.H. "The Psychology of Belief: IV. The Law of Primacy in Persuasion." Journal of Ab. and Social Psych 20 (1925): 183-191.

McCabe, Linda Lueckel. "Modality and Serial Position Effects in Immediate and Delayed Recall." Dissertation Abstracts International 42/6-A (1981)

Rankis, Olaf E. "The Effects of Sexual Gender, Message, Structure and Verbal Organizing Ability Upon Learning of Message Information." Dissertation Abstracts International 42/6-A (1981).

Roever, James E. "Audience Perception of Speaker Training: An Expectancy Artifact in Communication Research." Central States Speech Journal 27 (1976): 47-55.

Rokoff, Michael E., and Gerald R. Miller, eds. Persuasion: New Directions in Theory and Research. Beverly Hills: Sage Publications, 1980.

Rosnow, Ralph. Whatever Happened to the Law of Primacy?" Journal of Communication (1966): 10-31.

Runcie, Dennis Norman. "Distribution of Primacy and Secondary Memory on the Serial Position Curve as Measured by Reaction Time." Dissertation Abstracts International 32/9-B (1971).

Shaw, M.E. "A Serial Position Effect in Social Influence on Group Decisions." Journal of Social Psychology (1961): 54, 83-91.

Shurter, E.D. Rhetoric of Oratory. New York, 1912.

Sikkink, Donald E. "An Experimental Study of the Effects of the Listener of Anti-Climax Order and Authority in an Argumentative Speech." Southern Speech Journal 22 (1956): 73-78.

Sponberg, N.A. "A Study of the Relative Effectiveness of Climax and Anti-Climax Order in an Argumentative Speech." Speech Monogr (1946): 13, 35-44.

Stanny, Claudia J. "Serial Position Effects in Visual Memory: The Effects of Repetition on Item and Order Information." Dissertation Abstracts International 42/3-B (1981)

Stone, Vernon A. "A Primacy Effect in Decision-Making by Jurors." Journal of Communication 19 (1969): 239-247.

Toglia, M.P. and G.A. Kimble. "Recall and Use of Serial Position Information." Journal of Experimental Psych: Human Learning and Memory (1976): 2, 431-445.

Twardowski, Sister Mary Matthew. "An Investigation of the Serial Position Effect and the Effect of List Length on the Immediate Recognition of Classroom Instructional Material Presented in Lecture Form." Dissertation Abstracts International 34/2-A (1972).

Weaver, A.T. Speech Forms and Principles. New York, 1941.

Whitten, William B. III. "Output Interference and Long-term Serial Position Effects." Journal of Experimental Psych: Human Learning and Memory 4 1978: 685-692.

William, David Brian. "Short-term Retention of Pitch Sequence: Effects of Sequence Length, Serial Position, and Delay Time Before Recall." Dissertation Abstracts International 34/8-A (1973).

APPENDIX A

LETTER TO PARTICIPANTS

Appendix A-1

Dear :

I am working on my Master's Degree in Communications, and my thesis deals with first affirmative debate speeches. Since you have agreed to judge for the Shawnee Heights debate tournament, I would appreciate it if you would be willing to participate in my study.

If you are interested, I would ask that you arrive thirty minutes before the first round you judge. You will view an eight minute video taped speech and fill out a questionnaire. No names will be used. Should you be willing to help but unable to come at that time, we can set up an alternate date and time.

I will be calling soon to obtain your decision and make arrangements if appropriate.

Yours truly,

Anna Kapfer

APPENDIX B

SECOND LETTER

Appendix B-1

Dear :

I am doing my Master's thesis in Communications. My hypothesis deals with debate, and I am in the process of compiling my data.

Because you are connected with debate or have judged, I am writing to ask if you would be willing to participate in my study. It would involve watching an eight minute video tape and filling out a questionnaire, total time would be 20 to 30 minutes. The dates and times are: October 27, 7 p.m. and 8 p.m. and October 30, 7 p.m. and 8 p.m.

This information will be used not only for my thesis but also to help in teaching debaters more effective speeches. Judging experience does not matter.

I will be calling soon to make arrangements if you are able to participate.

Yours truly,

Anna Kapfer (Tina)

This will take place at Shawnee Heights High School.

APPENDIX C

SPEECH

Appendix C-1

INTRODUCTION

Foreign importers of American grain have been repeating an ugly apothem:

IF YOU CAN'T AFFORD TO BUY THE BEST, THEN BUY AMERICAN'

Well, as ridiculous as this may seem, the slogan speaks only truth. Markets for American grain are becoming few and far between. Surprisingly, it's not the high prices that extinguishes our sales. Instead, the importers complain about grain quality and the U.S. grain standards that are involved. Action is obviously needed to prevent an American role as supplier of last resort.

Therefore, we, as the Affirmative, have no choice but to stand

RESOLVED: That the Federal Government should implement a comprehensive long-term agricultural policy in the United States.

Before going further, a brief definition of dockage shall be provided. It is simply non-grain material that may be easily added to or removed from grain.

Also, the Federal Grain Inspection Service will be abbreviated as the FGIS.

The problem is obviously the standards that control grain quality. A simple change in the standards could mean more exports and more money for everyone as it is explained in

In CONCLUSION: The 70 year old standards are outdated; it's time to adjust to the needs of the world market to save exports.

Dale McDonald sums it up well in '85:

(Dale McDonald, staff, Farm Journal, Oct. 1985, p. 16.)

There has been no major change in our grain marketing system in 70 years. As Peter Bloome says, "The grain standards have either stood the test of time and were visionary, or they are horribly outdated and we are just limping along."

We must act now. Inefficient grain standards are the greatest obstacle to expanding export markets. Your vote

can make the difference. We have the vehicle to provide the expansion, and we have the necessary resources. Therefore, we ask for an Affirmative concurrence.

With this in mind, let's continue with the issue of SIGNIFICANCE.

OBSERVATION A. The extent of the grain situation demands Affirmative action.

SUBPOINT -

A. U.S. grain exports suffer from poor quality.

For substantiation, turn to Reichenberger in March of '86:

(Larry Reichenberger, staff, Farm Journal, March 1986, p. 13).

"The U.S. sells the dirtiest grain in the world," says Ervain Friehe, chairman of the Nebraska Wheat Board. Friehe cites a comparison of the dockage and foreign material contained in the U.S., Canadian and Australian wheat cargoes arriving in Japan between 1982 and 1985 to support his claim. The data shows the U.S. delivering nearly six times more dockage than Canada and more than twice as much as Australia. The U.S. also delivered 191% more foreign material than Canada and 550% more than Australia.

Images of poor quality grain are unfortunately real, but this is understandable when one discovers Subpoint

B. Export standards for grain only encourage the addition of dockage.

(Randy Richmeier, KSU, Grass & Grain, May 27, 1986, p. 9.

The current dockage system works when the Federal Grain Inspection Service measures the dockage and then the percentage of dockage in grain is rounded down to the nearest half percent, so that everything from 0 to .49 percent is certified as zero, and anything from .5 to .99 percent is certified as 0.5 and so forth on up the scale.

So since additional dockage is not reported, the standards allow exporters to add dockage in hope of increasing profits without having to report it to our importers. The Result--SUBPOINT

C. Importers receive what they believe to be poor quality grain.

Appendix C-3

According to Martha Mast in '85...
(Martha Mast, Washington correspondent for Feedstuffs, 4/22/85, p. 1).

In the first six months of fiscal 1985, FGIS (the Federal Grain Inspection Service) received 45 formal and informal complaints involving 59 export elevators. As of April 11, Foreign complaints about the quality of U.S. corn had nearly doubled from the total number of complaints in fiscal 1984, and foreign complaints about soybeans had nearly tripled, according to Karen Nelson, a spokesperson for FGIS.

The action that's needed to correct the grain situation is being prevented as the problems are identified in

OBSERVATION B. Inherency.

SUBPOINT.

A. Grain exporting companies and unions will not allow standard changes.

McDonald in '85 explains that, and I quote...

(Dale McDonald, staff, Farm Journal, Oct. 1985, p. 16).

When we /the legislators/ proposed to alter the way dockage is reported, the grain industry didn't want it. Union Equity even conducted a letter-writing campaign to stop it. You also have to realize that the Advisory Committee/to the FGIS/is dominated by industry people. When something comes up they don't want, the sheer weight of numbers stops it. Major changes/in grain standards/ are never made.

As a matter of fact, legislation identical to the Affirmative was tried with the '85 farm bill, but as Subpoint B. points out:

B. Legislation to change the standards has failed.

Reichenberger in '86.

(Larry Reichenberger, staff, Farm Journal, March '86, p. 15.)

The debate/over changing the grain standards/reached Congress last fall, and grain industry spokesmen admit they dodged a bullet when several grain quality amendments to the recent farm bill failed.

Nevertheless, SUBPOINT.

C. Legislative action is the only solution.

McDonald in '85

(Dale McDonald, staff, Farm Journal, December 1985, p. 15.)

But evidence suggests that relying on administrative means will prove fruitless. Therefore, federal legislation may be the only way to deal with this/grain quality problem/, and we are committed to this direction, if necessary.

With _____ X _____ covered, the next issue that demands attention is that of HARMS.

OBSERVATION C. The United State suffers from decreased exports.

Initially, the link between export sales and quality shall be given in SUBPOINT.

A. Grain export volume and grain quality are linked.

For the evidence, we turn to Feedstuffs, April 22, 1985. (p. 8.)

Industry advisors to FGIS last week admitted that concern over U.S. grain quality has become an issue affecting the volume of U.S. exports.

Now the actual loss from this link is identified in SUBPOINT.

B. Dirty grain is driving our customers away, as McDonald reports in '85.

(Dale McDonald, staff, Farm Journal, October 1985, p. 14.)

In 1975, European buyers complained stridently that our corn, soybeans and wheat arrived in their ports loaded with dirt or in poor condition. Nothing has changed. Dozens of interviews with importers and grain handling experts confirmed that we still ship dirty grain. /But/What has changed is that the buyers used to threaten to take their business elsewhere--now they do it.

Therefore grain quality hinders current contracts. But at the same time, the actual purity of U.S. grain is only secondary, the factor that determines actual sales is the image of the U.S. as a grain supplier. Currently, SUBPOINT.

Appendix C-5

C. Our poor image is preventing market expansion.

Turning to Mast in '85

(Martha Mast, Washington Correspondent for Feedstuffs, April 22, 1985. (p. 1).

FGIS officials said the U.S. is losing sales because many importers believe/or perceive/ that there are quality problems with U.S. grain.

OBSERVATION D. SOLVENCY.

SUBPOINT

A. New standards will increase grain quality.

New standards will eliminate complaints as importers won't feel deceived. Richmeier substantiates in '86.

(Randy Richmeier, KSU, Grass & Grain, May 27, 1986, p. 9.)

Adoption of the new dockage alternative/referring to new standards on rounding dockage/would totally eliminate the problem of hidden or undisclosed dockage...The hidden dockage is what the foreign buyer is complaining about. The official certificate for a lot of wheat may read zero percent dockage, but upon arrival to the buyer it may contain non-wheat material.

The need for better quality is identified in SUBPOINT.

B. Better grain quality will maintain and increase world markets.

An article appearing in Grass & Grain in April of 1986 explains:

(Grass & Grain, April 8, 1986, p. 42.)

Representative of major grain importing countries say the United States must improve grain quality to keep and increase its share of world markets.

And finally, as a pre-emptive measure, we offer SUBPOINT.

C. The benefits of new grain standards will far exceed the costs.

Quoting Winston Wilson in '85.

Appendix C-6

(Dale McDonald, staff, Farm Journal, October, 1985, p. 16., statement by Winston Wilson, U.S. What Associates.)

Whatever definition of dockage is used it is clear that the reputation of U.S. wheat has suffered in recent years--to the disadvantage of U.S. producers...Industry comments more or less promised that dollars will be taken from farmers' pockets and given to the buyer/if standards are changed/.../However,/The long-run cost to producers of lost business would certainly far exceed the relatively minute cost of changing the standards.

APPENDIX D

INSTRUCTIONS TO PARTICIPANTS

RELEASE

I hereby agree to watch a video taped first affirmative speech and fill out a questionnaire. This will be used to compile data for a Master's thesis and my name will not be used in this study.

Name _____
Date _____

INSTRUCTIONS TO PARTICIPANTS

Please watch the video tape and use notes or not as you would naturally. After the speech, I will ask you to fill out a questionnaire for use to study how people listen to first affirmative debate speeches. You will have all the time you need but please finish before leaving this room.

DEBRIEFING

Thank you very much for your cooperation. Results from this study will be mailed to you upon completion. Your help will enable us to more effectively teach the young people who become involved in debate with such areas as organization.

This will be printed on paper to be given out as the questionnaire is handed in.

APPENDIX E

QUESTIONNAIRE

Appendix E-1

Please fill in the following.

Age: _____ Sex: _____ (M or F) Occupation: _____

Highest grade level achieved: 1-8___ 9-12 ___ 13-16 _____
16+ _____

Notetaking: No notes _____ Some notes _____
Outlined entire speech _____

Judging experience in the past 2 years: 0-10 rounds _____
11-20 rounds _____ 21-30 rounds _____
31-40 rounds _____ 41-50 rounds _____
50+ rounds _____

Debate experience (circle one): high school 0 1 2 3 4
college 0 1 2 3 4

Please write the argument given under each heading:

Significance

Harm

Inherency

Solvency

Which of these do you feel you remember most accurately?

Please rate the persuasiveness of the speech.

not very	somewhat	below average	average	above average

very extremely

How well organized was this speech?

not very	somewhat	below average	average	above average

very extremely

When you finish, please given this questionnaire to the person who gave instructions. Thank you for your time.

TABLE I

DEMOGRAPHICS

	HIGH	LOW	MODE	MEAN	STD. DEV.
AGE	64	19	38	38.0566	9.4252
EDUCATION IN YEARS	16+	9-12	16+	13-16	.7936
JUDGING EXPERIENCE IN ROUNDS	50+	0-10	0-10	0-10	.8541
DEBATE EXPERIENCE IN YEARS	7	0	0	3	9.6092

(Distribution scewed due to 21 subjects having between 1-4 years)

TABLE II

ARGUMENTS RECALLED

		SIGNIF.	HARMS	INHER.	SOLVENCY	ROW TOTALS	CHI-SQUARE
POSITION 1	ACTUAL TOTAL	29	28	38	21	116	0.316126
	EXPECTED 26.1261	26.126	24.297	32.135	33.441		0.564261
	% OF GT	0.065	0.063	0.086	0.047		1.070375
							4 628672
POSITION 2	ACTUAL TOTAL	27	22	29	34	112	0.124868
	EXPECTED	25.225	23.459	31.027	32.288		0.090796
	% OF GT	0.061	0.050	0.065	0.077		0.132428
							0.090744
POSITION 3	ACTUAL TOTAL	21	18	25	31	95	0.007344
	EXPECTED	21.396	19.899	26.318	27.387		0.181161
	% OF GT	0.047	0.041	0.056	0.070		0.065963
							0.476532
POSITION 4	ACTUAL TOTAL	23	25	31	42	121	0.663492
	EXPECTED	27.252	25.345	33.520	34.883		0.004685
	% OF GT	0.052	0.056	0.070	0.095		0.189490
							1.452098
	COLUMN TOTALS	100	93	123	128	444	
	CHI-SQUARE 10.0590						

TABLE III

VERSION	CORRECT RECALLS	POSITION 1	POSITION 2	POSITION 3	POSITION 4
1		SIGNIFICANCE	HARM	INHERENCY	SOLVENCY
	0	4	3	4	3
	1		1		1
	2				
	3				
2		INHERENCY	SIGNIFICANCE	SOLVENCY	HARM
	0	10	5	3	3
	1		5	6	7
	2			1	
	3				
3		HARM	INHERENCY	SOLVENCY	SIGNIFICANCE
	0	3	6	4	3
	1	3		2	3
	2				
	3				
4		SOLVENCY	HARM	SIGNIFICANCE	INHERENCY
	0	4	1	5	5
	1	1	3		
			1		

TABLE IV

SELECTED PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS

ARG 1		.0025	NOTE		-.0635
WITH			WITH		
REM	sig	.980	VERSION	sig	.518
ARG 2		-.0399	JUEX		.2937
WITH			WITH		
REM	sig	.685	ARG 1	sig	.002
ARG 3		-.0880	JUEX		.3308
WITH			WITH		
REM	sig	.370	ARG 2	sig	.001
ARG 4		-.1701	JUEX		.1044
WITH			WITH		
REM	sig	.081	ARG 3	sig	.287
NOTE		.3222	JUEX		.3569
WITH			WITH		
JUEX	sig	.001	ARG 4	sig	.000
REM		-.0012	RTPR		.4530
WITH			WITH		
VERSION	sig	.990	RTUR	sig	.000
RTPR		-.0950	RTUR		-.0867
WITH			WITH		
VERSION	sig	.333	VERSION	sig	.377

TABLE IV (Continued)

RTPR = perceived persuasion

RTUR = perceived organization

VERSION = which of the three arrangements of the speech

REM = which argument the subject felt they remembered most accurately

TABLE V

SELECTED SPEARMAN CORRELATION COEFFICIENTS

NOTE WITH AGE	sig	-.2597 .004	NOTE WITH JUEX	sig	.3095 .001
NOTE WITH ARG 1	sig	.4516 .000	NOTE WITH ARG 3	sig	.4463 .000
NOTE WITH ARG 2	sig	.6638 .000	NOTE WITH ARG 4	sig	.6118 .000

NOTE = amount of notes taken

JUEX = number of rounds of judging experience

ARG = argument